

**METHOD AND APPARATUS FOR INJECTION OF IP MULTICAST CONTENT
INTO AN ATM DSL NETWORK**

ABSTRACT OF THE INVENTION

A method and apparatus enables legacy NSP and other networks which use ATM switches that lack multicasting capabilities to acquire and distribute IP multicast transmissions to content subscribers on ATM DSL networks. The method and apparatus further provides the ability for insertion of local advertising content into received IP streams for subsequent distribution over an ATM network. An IP ATM Multicaster (IAM) converts IP multicast signals to ATM protocol and replicates the converted IP multicast packets in response to IGMP join requests received from one or more prospective multicast content recipients. The IAM acts as a bridge between IP protocol and ATM protocol environments that handles conversions and encapsulation protocols between environments. An alternate embodiment utilizes an ATM IP Multicast Inserter (AIMI) that embodies similar functions as the IAM but without using multiple virtual circuits. A Local Ad Inserter (LAI) is provided for enabling insertion of advertisements into the IP multicast data stream prior to insertion into the ATM network.